

SEQUENCE LISTING

<110> Ni, Jian
Yu, Guo-Liang
Fan, Ping
Gentz, Reiner L.

<120> Human Tumor Necrosis Factor Receptor TR9

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<150> 09/095,094
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Gln Val Leu Thr Cys Asp Lys Cys Pro Ala Gly Thr Tyr Val Ser Glu		
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His Cys Thr Asn Thr Ser Leu Arg Val Cys Ser Ser Cys Pro Val Gly		
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Thr Phe Thr Arg His Glu Asn Gly Ile Glu Lys Cys His Asp Cys Ser		
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Gln Pro Cys Pro Trp Pro Met Ile Glu Lys Leu Pro Cys Ala Ala Leu		
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cag gaa ggg aca gtc cct gac aac aca agc tca gca agg ggg aag gaa Gln Glu Gly Thr Val Pro Asp Asn Thr Ser Ser Ala Arg Gly Lys Glu 235	240	245	1104
gac gtg aac aag acc ctc cca aac ctt cag gta gtc aac cac cag caa Asp Val Asn Lys Thr Leu Pro Asn Leu Gln Val Val Asn His Gln Gln 250	255	260	1152
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ccc tgg atg att gtg ctt ttc ctg ctg ctg gtg ctt gtg gtg att gtg Pro Trp Met Ile Val Phe Leu Leu Leu Val Leu Val Val Ile Val 315	320	325	1344
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ggg atc gat atc ctg aag ctt gta gca gcc caa gtg gga agc cag tgg Gly Ile Asp Ile Leu Lys Leu Val Ala Ala Gln Val Gly Ser Gln Trp 375	380	385	1536
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Leu	Thr	Cys	Asp	Lys	Cys	Pro	Ala	Gly	Thr	Tyr	Val	Ser	Glu	His	Cys
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Cys	Pro	Trp	Pro	Met	Ile	Glu	Lys	Leu	Pro	Cys	Ala	Ala	Leu	Thr	Asp
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Ala	Pro	His	Thr	Val	Cys	Pro	Val	Gly	Trp	Gly	Val	Arg	Lys	Lys	Gly
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 Pro Ser Ala Ile Val Glu Lys Ala Gly Leu Lys Lys Ser Met Thr Pro
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 Thr Gln Asn Arg Glu Lys Trp Ile Tyr Tyr Cys Asn Gly His Gly Ile
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 Asp Ile Leu Lys Leu Val Ala Ala Gln Val Gly Ser Gln Trp Lys Asp
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 Ile Tyr Gln Phe Leu Cys Asn Ala Ser Glu Arg Glu Val Ala Ala Phe
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 Ser Asn Gly Tyr Thr Ala Asp His Glu Arg Ala Tyr Ala Ala Leu Gln
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 His Trp Thr Ile Arg Gly Pro Glu Ala Ser Leu Ala Gln Leu Ile Ser
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 Asp Ser Thr Ser Ser Gly Ser Ser Ala Leu Ser Arg Asn Gly Ser Phe
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 Ile Thr Lys Glu Lys Lys Asp Thr Val Leu Arg Gln Val Arg Leu Asp
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 Pro Cys Asp Leu Gln Pro Ile Phe Asp Asp Met Leu His Phe Leu Asn

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560

565

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Leu Glu Gly Leu His His Asp Gly Gln Phe Cys His Lys Pro Cys Pro
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Pro Gly Glu Arg Lys Ala Arg Asp Cys Thr Val Asn Gly Asp Glu Pro
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Asp Cys Val Pro Cys Gln Glu Gly Lys Glu Tyr Thr Asp Lys Ala His
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Phe Ser Ser Lys Cys Arg Arg Cys Arg Leu Cys Asp Glu Gly His Gly
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Leu Glu Val Glu Ile Asn Cys Thr Arg Thr Gln Asn Thr Lys Cys Arg
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Cys Lys Pro Asn Phe Phe Cys Asn Ser Thr Val Cys Glu His Cys Asp
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Lys Glu Val Gln Lys Thr Cys Arg Lys His Arg Lys Glu Asn Gln Gly
 195 200 205

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Thr Leu Ser Gln Val Lys Ala Asn Leu Cys Thr Leu Ala Glu Lys Ile
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Leu Gly Glu Gly Val Ala Gln Pro Cys Gly Ala Asn Gln Thr Val Cys
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Glu Pro Cys Leu Asp Ser Val Thr Phe Ser Asp Val Val Ser Ala Thr
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Glu Pro Cys Lys Pro Cys Thr Glu Cys Val Gly Leu Gln Ser Met Ser
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Ala Pro Cys Val Glu Ala Asp Asp Ala Val Cys Arg Cys Ala Tyr Gly
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Tyr Tyr Gln Asp Glu Thr Thr Gly Arg Cys Glu Ala Cys Arg Val Cys
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Glu Ala Gly Ser Gly Leu Val Phe Ser Cys Gln Asp Lys Gln Asn Thr
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 145 150 155 160

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 Leu Arg Glu Cys Thr Arg Trp Ala Asp Ala Glu Cys Glu Glu Ile Pro
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 Gly Arg Trp Ile Thr Arg Ser Thr Pro Pro Glu Gly Ser Asp Ser Thr
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 Ala Pro Ser Thr Gln Glu Pro Glu Ala Pro Pro Glu Gln Asp Leu Ile
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 Ala Ser Thr Val Ala Gly Val Val Thr Thr Val Met Gly Ser Ser Gln
 225 230 235 240
 Pro Val Val Thr Arg Gly Thr Thr Asp Asn Leu Ile Pro Val Tyr Cys
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 Ser Ile Leu Ala Ala Val Val Val Gly Leu Val Ala Tyr Ile Ala Phe
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 Lys Arg Trp Asn Ser Cys Lys Gln Asn Lys Gln Gly Ala Asn Ser Arg
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 Pro Val Asn Gln Thr Pro Pro Glu Gly Glu Lys Leu His Ser Asp
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 Ser Gly Ile Ser Val Asp Ser Gln Ser Leu His Asp Gln Gln Pro His
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 325 330 335
 Ser Ser Leu Pro Pro Ala Lys Arg Glu Glu Val Glu Lys Leu Leu Asn
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 Gly Ser Ala Gly Asp Thr Trp Arg His Leu Ala Gly Glu Leu Gly Tyr
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 Gln Pro Glu His Ile Asp Ser Phe Thr His Glu Ala Cys Pro Val Arg
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 Arg Glu Val Ala Pro Pro Tyr Gln Gly Ala Asp Pro Ile Leu Ala Thr
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Tyr Ile His Pro Gln Asn Asn Ser Ile Cys Cys Thr Lys Cys His Lys
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Gly Thr Tyr Leu Tyr Asn Asp Cys Pro Gly Pro Gly Gln Asp Thr Asp
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Cys Arg Glu Cys Glu Ser Gly Ser Phe Thr Ala Ser Glu Asn His Leu
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Arg His Cys Leu Ser Cys Ser Lys Cys Arg Lys Glu Met Gly Gln Val
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Glu Ile Ser Ser Cys Thr Val Asp Arg Asp Thr Val Cys Gly Cys Arg
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Lys Asn Gln Tyr Arg His Tyr Trp Ser Glu Asn Leu Phe Gln Cys Phe
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Lys Gln Asn Thr Val Cys Thr Cys His Ala Gly Phe Phe Leu Arg Glu
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195 200 205
Gly Thr Thr Val Leu Leu Pro Leu Val Ile Phe Phe Gly Leu Cys Leu
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Leu Ser Leu Leu Phe Ile Gly Leu Met Tyr Arg Tyr Gln Arg Trp Lys
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Ser Lys Leu Tyr Ser Ile Val Cys Gly Lys Ser Thr Pro Glu Lys Glu

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Phe Ser Pro Thr Pro Gly Phe Thr Pro Thr Leu Gly Phe Ser Pro Val			
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Pro Asn Phe Ala Ala Pro Arg Arg Glu Val Ala Pro Pro Tyr Gln Gly			
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Pro Leu Gln Lys Trp Glu Asp Ser Ala His Lys Pro Gln Ser Leu Asp			
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Thr Asp Asp Pro Ala Thr Leu Tyr Ala Val Val Glu Asn Val Pro Pro			
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gcattttctt atgcccattt catgccttgtt aaaggtcccc acagggcaac tgctgacaga 120
cgcgcggctt gtgttgttac atgctcagag acataggttc ctgctggaca cttgtcacag 180
gttagcacct agccgggtggc acggtaaca tggcggtatg tgcaatgag attcgaggcc 240
ttctgttctg gctgagctgt ggtggtgcta aggaatccaa gcggagaagg gagccagat 300
catcgtggct gtggctggcg ggcgatgcgg ttcaggaggc cgagg 345

<210> 9
<211> 316
<212> DNA
<213> Homo sapiens

<400> 9
gctaatttgc accggagaaa cgatgttgg agaagattcg tgggctgatg 60
gaagacacca cccagcttga aactgacaaa ctagctctcc cgatgagccc cagcccgctt 120
agccccgagcc ccatccccag ccccaacgcg aaacttgaga attccgctct cctgacgggt 180
gagccctttcc cacaggacaa gaacaaggcc ttcttcgtgg atgagtcgga gccccttctc 240
cgctgtactc tacatccagc ggctccctcg gctgagcagg aacggttctt ttattaccaa 300
aaaaagaagg acacag 316

<210> 10
<211> 489
<212> DNA
<213> Homo sapiens

<400> 10
aattcggcac gaggaatcataaaggatgc tttatgtctc ttaacattca cacctacttt 60
ttaaaaaacaa atattattac tatttttattt attgtttgtc ctttataaaat tttcttaaag 120
attaagaaaa tttaagaccc cattgagttt ctgtaatgca attcaacttt gagttatctt 180
ttaaatatgt ctgtatagt tcatattcat ggctgaaact tgaccacact attgctgatt 240

gtatggttca cctggcaccc tgttagatgct tgattacttg tactctctta tgtaaatgct 300
 ctgggctggg gaatgaatcc caggcgcagg tttccctatt aagggggttca ctggcccaa 360
 gactgactcc cttggggttg gggttggaca atgtcttggg agaaaagccg gggcttccag 420
 ggccccctt gtaagggttt taaaaaaaaaag ccattctgag ctcgccgggg tcccattaa 480
 aaggcccg 489

<210> 11
 <211> 26
 <212> DNA
 <213> Homo sapiens

<400> 11
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26

<210> 12
 <211> 28
 <212> DNA
 <213> Homo sapiens

<400> 12
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28

<210> 13
 <211> 33
 <212> DNA
 <213> Homo sapiens

<400> 13
 cgccccgggg ccatcatggg gacctctccg agc

33

<210> 14
 <211> 28
 <212> DNA
 <213> Homo sapiens

<400> 14
 cgcgtagtacct tagggcaaat gctcattg

28

<210> 15
 <211> 55
 <212> DNA
 <213> Homo sapiens

<400> 15
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55

<210> 16
 <211> 31
 <212> DNA

3> Homo sapiens

0> 16
tagatctg ccagaacaga aggccctcgaa t 31

0> 17
1> 31
2> DNA
3> Homo sapiens

00> 17
atcttcctt gacctgctgt agtctagagc c 31

10> 18
11> 30
12> DNA
13> Homo sapiens

00> 18
cgaccacg agcgggccta gtcttagagcc 30

10> 19
11> 147
12> PRT
13> Homo sapiens

100> 19
mr Cys Asp Lys Cys Pro Ala Gly Thr Tyr Val Ser Glu His Cys Thr
1 5 10 15

sn Thr Ser Leu Arg Val Cys Ser Ser Cys Pro Val Gly Thr Phe Thr
20 25 30

rg His Glu Asn Gly Ile Glu Lys Cys His Asp Cys Ser Gln Pro Cys
35 40 45

ro Trp Pro Met Ile Glu Lys Leu Pro Cys Ala Ala Leu Thr Asp Arg
50 55 60

lu Cys Thr Cys Pro Pro Gly Met Phe Gln Ser Asn Ala Thr Cys Ala
65 70 75 80

ro His Thr Val Cys Pro Val Gly Trp Gly Val Arg Lys Lys Gly Thr
85 90 95

lu Thr Glu Asp Val Arg Cys Lys Gln Cys Ala Arg Gly Thr Phe Ser
100 105 110

Asp Val Pro Ser Ser Val Met Pro Cys Lys Ala Tyr Thr Asp Cys Leu
115 120 125

Ser Gln Asn Leu Val Val Ile Lys Pro Gly Thr Lys Glu Thr Asp Asn

130 135

140

Val Cys Gly
145

<210> 20
<211> 147
<212> PRT
<213> Homo sapiens

<400> 20
Leu Cys Asp Lys Cys Pro Pro Gly Thr Tyr Leu Lys Gln His Cys Thr
1 5 10 15

Ala Lys Trp Lys Thr Val Cys Ala Pro Cys Pro Asp His Tyr Tyr Thr
20 25 30

Asp Ser Trp His Thr Ser Asp Glu Cys Leu Tyr Cys Ser Pro Val Cys
35 40 45

Lys Glu Leu Gln Tyr Val Lys Gln Glu Cys Asn Arg Thr His Asn Arg
50 55 60

Val Cys Glu Cys Lys Glu Gly Arg Tyr Leu Glu Ile Glu Phe Cys Leu
65 70 75 80

Lys His Arg Ser Cys Pro Pro Gly Phe Gly Val Val Gln Ala Gly Thr
85 90 95

Pro Glu Arg Asn Thr Val Cys Lys Arg Cys Pro Asp Gly Phe Phe Ser
100 105 110

Asn Glu Thr Ser Ser Lys Ala Pro Cys Arg Lys His Thr Asn Cys Ser
115 120 125

Val Phe Gly Leu Leu Thr Gln Lys Gly Asn Ala Thr His Asp Asn
130 135 140

Ile Cys Ser
145

<210> 21
<211> 67
<212> PRT
<213> Homo sapiens

<400> 21
Gln Trp Lys Asp Ile Tyr Gln Phe Leu Cys Asn Ala Ser Glu Arg Glu
1 5 10 15

Val Ala Ala Phe Ser Asn Gly Tyr Thr Ala Asp His Glu Arg Ala Tyr
20 25 30

Ala Ala Leu Gln His Trp Thr Ile Arg Gly Pro Glu Ala Ser Leu Ala
 35 40 45

Gln Leu Ile Ser Ala Leu Arg Gln His Arg Arg Asn Asp Val Val Glu
 50 55 60

Lys Ile Arg
 65

<210> 22
<211> 68
<212> PRT
<213> Homo sapiens

<400> 22
Gln Val Lys Gly Phe Val Arg Lys Asn Gly Val Asn Glu Ala Lys Ile
 1 5 10 15

Asp Glu Ile Lys Asn Asp Asn Val Gln Asp Thr Ala Glu Gln Lys Val
 20 25 30

Gln Leu Leu Arg Asn Trp His Gln Leu His Gly Lys Lys Glu Ala Tyr
 35 40 45

Asp Thr Leu Ile Lys Asp Leu Lys Lys Ala Asn Leu Cys Thr Leu Ala
 50 55 60

Glu Lys Ile Gln
 65

<210> 23
<211> 68
<212> PRT
<213> Homo sapiens

<400> 23
Arg Trp Lys Glu Phe Val Arg Arg Leu Gly Leu Ser Asp His Glu Ile
 1 5 10 15

Asp Arg Leu Glu Leu Gln Asn Gly Arg Cys Leu Arg Glu Ala Gln Tyr
 20 25 30

Ser Met Leu Ala Thr Trp Arg Arg Arg Thr Arg Arg Glu Ala Thr Leu
 35 40 45

Glu Leu Leu Gly Arg Val Leu Arg Asp Met Asp Leu Leu Gly Cys Leu
 50 55 60

Glu Asp Ile Glu
 65

<210> 24

<211> 65

<212> PRT

<213> Homo sapiens

<400> 24

Arg	Trp	Lys	Glu	Phe	Val	Arg	Thr	Leu	Gly	Leu	Arg	Glu	Ala	Glu	Ile
1				5				10					15		

Glu	Ala	Val	Glu	Val	Glu	Ile	Gly	Arg	Phe	Arg	Asp	Gln	Gln	Tyr	Glu
		20			25							30			

Met	Leu	Lys	Arg	Trp	Arg	Gln	Gln	Gln	Pro	Ala	Gly	Leu	Gly	Ala	Val
		35			40						45				

Tyr	Ala	Ala	Leu	Glu	Arg	Met	Gly	Leu	Asp	Gly	Cys	Val	Glu	Asp	Leu
			50			55			60						

Arg

65

<210> 25

<211> 67

<212> PRT

<213> Homo sapiens

<400> 25

Ser	Trp	Asp	Gln	Leu	Met	Arg	Gln	Leu	Asp	Leu	Thr	Lys	Asn	Glu	Ile
1				5				10					15		

Asp	Val	Val	Arg	Ala	Gly	Thr	Ala	Gly	Pro	Gly	Asp	Ala	Leu	Tyr	Ala
		20			25						30				

Met	Leu	Met	Lys	Trp	Val	Asn	Lys	Thr	Gly	Arg	Asn	Ala	Ser	Ile	His
			35			40					45				

Thr	Leu	Leu	Asp	Ala	Leu	Glu	Arg	Met	Glu	Glu	Arg	His	Ala	Lys	Glu
		50			55				60						

Lys Ile Gln

65

<210> 26

<211> 67

<212> PRT

<213> Homo sapiens

<400> 26

Ser	Trp	Glu	Pro	Leu	Met	Arg	Lys	Leu	Gly	Leu	Met	Asp	Asn	Glu	Ile
1				5				10					15		

Lys	Val	Ala	Lys	Ala	Glu	Ala	Ala	Gly	His	Arg	Asp	Thr	Leu	Tyr	Thr
		20			25						30				

Met Leu Ile Lys Trp Val Asn Lys Thr Gly Arg Asp Ala Ser Val His
35 40 45

Thr Leu Leu Asp Ala Leu Glu Thr Leu Gly Glu Arg Leu Ala Lys Gln
50 55 60

Lys Ile Glu
65

<210> 27
<211> 733
<212> DNA
<213> Homo sapiens

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aattcgaggg tgccacgtca gtcttccctc tccccccaaa acccaaggac accctcatga 120
tctccggac tcctgagggtc acatgcgtgg tggtgacgt aagccacgaa gaccctgagg 180
tcaagttcaa ctggtaacgtg gacggcgtgg aggtgcataa tgccaagaca aagccgcggg 240
aggagcagta caacagcact tacgggtgtgg tcagcgtcct caccgtcctg caccaggact 300
ggctgaatgg caaggagtagc aagtgcagg tctccaacaa agccctccca acccccattcg 360
agaaaaaccat ctccaaagcc aaagggcagc cccgagaacc acagggtgtac accctgcggc 420
catcccgaaa tgagctgacc aagaaccagg tcagcgtcctc ctggctggtc aaaggcttct 480
atccaagcga catcgccgtg gagttggaga gcaatggca gccggagaac aactacaaga 540
ccacgcctcc cgtgctggac tccgacggct cttttttctt ctacagcaag ctcaccgtgg 600
acaagagcag gtggcagcag gggAACGTCT ttcatgtct cgtgatgtcat gaggctctgc 660
acaaccacta cacgcagaag agcctctccc tgtctccggg taaatgatgt cgacggccgc 720
gactctagag gat 733